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Title: BACKGROU

BACKGROUND RENDERING OF IMAGES

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**IN THE CLAIMS** 

Please amend the claims as follows.

1. (Currently amended) An apparatus comprising:

a rendering engine to render a foreground of an image; and

a logic, separate from the rendering engine, to merge blend at least one background color

with the foreground of the image, after the foreground of the image is rendered by the rendering

engine.

2. (Original) The apparatus of claim 1, wherein the logic comprises a background color

table that is to store the at least one background color.

3. (Original) The apparatus of claim 2, wherein the image is comprised of a number of

windows, the background color table to store a background color for the number of windows.

4. (Original) The apparatus of claim 1, further comprising a frame buffer to store pixels of

the foreground, wherein the logic is to retrieve the color values of the foreground.

5. (Original) The apparatus of claim 4, wherein the image is comprised of a number of

windows, the frame buffer to include ping-pong type buffers to store color values of the

foreground, the frame buffer to include a Z buffer to store identification of a window where the

pixels of the foreground are located, wherein the apparatus further comprises a buffer select table

to store an identification of one of the ping-pong type buffers that includes the color values of the

foreground of the image.

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6. (Original) The apparatus of claim 5, wherein the logic is to merge the at least one background color with the foreground of the image based on the identification of the window stored in the Z buffer and the identification of the one of the ping-pong type buffers stored in the buffer select table.

7. (Currently amended) A system for generating a merged image, the system comprising: a system memory;

a processor to generate graphics instructions based on execution of a graphics application, wherein the processor is to store the graphics instructions into the system memory;

a rendering engine coupled to the system memory through a graphics bus, the rendering engine to retrieve at least a part of the graphics instructions from the system memory and to render a foreground image based on the retrieved part of the graphics instructions; and

a background merge logic, separate from the rendering engine, and coupled to the system memory through a system bus, wherein the background merge logic is to retrieve at least a part of the graphics instructions from the system memory, wherein the background merge logic includes a background color table, the background merge logic to store at least one background color in the background color table based on the at least part of the graphics instructions, the background merge logic to merge blend, after the rendering engine has rendered the foreground image, the at least one background color received from the video source with a window of the rendered foreground image to generate the merged image.

8. (Original) The system of claim 7, further comprising a frame buffer to store a current read buffer, a current write buffer and a window buffer and wherein the background merge logic includes a buffer select table, wherein the rendering engine is to store color values and an attenuation value of pixels of the foreground image into the current write buffer, a window

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identification for the pixels into the window buffer and buffer identification for the pixels in the

buffer select table.

9. (Original) The system of claim 8, wherein the background merge logic further comprises

a multiply logic to multiply the at least one background color for the window of the rendered

foreground image with the attenuation value of the pixels for the window to generate an adjusted

background color.

10. (Original) The system of claim 9, wherein the background merge logic further comprises

an add logic to add the color values of the pixels of the foreground image with the adjusted

background color.

11. (Original) The system of claim 7, further comprising a display monitor, wherein the

background merge logic is to output the merged image for display on the display monitor.

12. (Currently amended) A method comprising:

retrieving a foreground of an image rendered by a rendering engine; and

blending a background color with the foreground of the image, independent of the

rendering engine and after the foreground is rendered by the rendering engine.

13. (Original) The method of claim 12, wherein blending the background color into the

image comprises:

multiplying an alpha intensity value of the foreground with a value of the background

color; and

adding a color value of the foreground with the value of the background color.

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14. (Original) The method of claim 12, wherein the alpha intensity value and the color value

of the foreground of the image are stored in an A buffer or a B buffer in a frame buffer and

wherein the background color is stored in a background color table that is not in the frame buffer.

15. (Original) The method of claim 14, further comprising selecting the background color

based on an identification of a window

16. (Original) A method of rendering an image, the method comprising:

performing the following operations in a hardware logic that is separate from a rendering

engine that renders at least one foreground pixel for a window in the image, wherein the

following operations are performed after the at least one foreground pixel is rendered:

retrieving the at least one foreground pixel from a frame buffer;

blending color data of a video with the at least one foreground pixel, upon

determining that the video is in the background at a location of the foreground pixel; and

blending a background pixel with the at least one foreground pixel, upon

determining that the video is not in the background at the location of the foreground pixel.

17. (Original) The method of claim 16, wherein blending the background pixel with the at

least one foreground pixel comprises retrieving the background pixel from a background color

table that is internal to the hardware logic based on an identification of the window.

18. (Original) The method of claim 16, wherein blending the background pixel with the at

least one foreground pixel comprises:

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multiplying an alpha intensity value of the at least one foreground pixel with a value of

the background pixel; and

adding a value of the foreground pixel with the value of the background pixel.

19. (Original) A method comprising:

rendering an image in a front-to-back order, wherein the rendering comprises:

rendering, by a rendering engine, foreground pixels of the image; and

blending, by a hardware logic that is separate from the rendering engine, the

image based on a merger of a background fill pixels with the foreground pixels.

20. (Original) The method of claim 19, wherein forming the image based on the merger of

the background fill pixels with the foreground pixels comprises:

assigning a weight of the background fill pixels relative to the foreground pixels based on

alpha intensity values of the foreground pixels; and

merging the background fill pixels with the foreground pixels based on the assigned

weight of the background fill pixels.

21. (Original) The method of claim 19, further comprising displaying the image.

22. (Currently amended) A method for displaying an image, the method comprising:

rendering, by a rendering engine, color data of a foreground pixel for a window of the

image, the color data including an alpha intensity value:

storing, by the rendering engine, the color data for the foreground pixel into a current

write buffer of a ping/pong buffer;

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performing the following operations, after rendering of the color data by the rendering engine, in a graphics logic having a background color table, independent of operations by the rendering engine:

retrieving an identification of the window;

retrieving, based on the identification of the window, an identification of a current read buffer of the ping/pong buffer from a buffer select table;

retrieving color data of a background pixel located at a same location in the image as the foreground pixel from the background color table based on the identification of the window and the identification of current read buffer;

adjusting an intensity of the color data of the background pixel based on the alpha intensity value; and

blending the adjusted color data of the background pixel with the color data of the foreground pixel.

23. (Original) The method of claim 22, further comprising displaying the merged background pixel data and foreground pixel data.